Appl. No. 10/074,449 Amdt. Dated July 12 2004 Reply to Office action of March 12, 2004

ABSTRACT OF THE DISCLOSURE

Method manufacturing hollow, fiber reinforced thermoplastic composite articles, such as a pressure vessel, is provided. The thermoplastic binder is chosen to bind the reinforcing fibers together, to provide strength, and to provide ease of manufacture. The method includes placing a preform with an inflatable core into a mold, pressurizing the inflatable core, and heating the mold to enable the thermoplastic binder to melt and distribute throughout the preform, binding the reinforcing fibers. The article is then cooled and removed from the mold, resulting in a hollow molded article. The inflatable core may be removed from the article and reused, or the core may become an integral part of the finished article.